

VARIABLE BLAZED GRATING

ABSTRACT

In one aspect of the invention, an apparatus operable to provide optical signal processing includes an inner conductive layer including an at least substantially conductive material and a plurality of at least partially reflective mirror strips disposed outwardly from the inner conductive layer and operable to receive an input optical signal, wherein none of the plurality of strips has a width greater than 40 microns. At least some of the strips are operable to undergo a partial rotation in response to a control signal, the partial rotation resulting in a diffraction of the input optical signal wherein a majority of the diffracted input signal is communicated in one direction.